

ULTRASOUND SIMULATOR FOR CRANIOSYNTOSIS SCREENING

Abstract of the Disclosure

An ultrasound simulator to train radiologists and technologists to locate and recognize patent and fused cranial sutures. The model is formed, for example, using specially fabricated heads or from life-sized plastic doll heads. Simulated suture lines are cut in the heads in anatomically correct positions. The typical end-to-end morphology of the sagittal and metopic sutures and the typical beveled appearance of the paired coronal and lambdoid sutures are created by angling the cutting blade. The hypoechoic appearance of patent sutures in ultrasound images is simulated by filling the gaps that were formed by cutting with a hypoechoic material. Fused echoic sutures are simulated by leaving that portion of the doll's head uncut, or by filling the openings with an echoic material. When imaged using ultrasound, the portions cut and filled with a hypoechoic material are readily distinguishable from uncut portions, and from portions cut and filled with an echoic material.